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Part IV

Environmental Protection Agency

Control of Air Pollution from New Motor Vehicles and New Motor Vehicle Engines; Submission of Altitude Performance Adjustments

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 86

[FRL-1383-2; Docket No. A-79-42]

Control of Air Pollution From New Motor Vehicles and New Motor Vehicle Engines; Proposed Regulations for the Submission of Altitude Performance Adjustments for Motor Vehicles

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of Proposed Rulemaking.

SUMMARY: The EPA is proposing this rulemaking to establish requirements for manufacturers to provide altitude performance adjustment instructions for motor vehicles. This action is intended to improve the emission control performance of vehicles at various altitudes. Section 215 of the Clean Air Act as amended in 1977 (the Act) provides the authority for this section.

DATES: *Public Hearing:* EPA will hold a public hearing on the provisions of the proposed action at least 30 days from the date of **Federal Register** publication. The date this hearing will be announced in the **Federal Register.**

Public Comment: During final rulemaking, EPA will consider comments received on or before 30 days from the date of public hearing.

ADDRESSES: Interested persons may participate in this rulemaking by submitting written comments to: U.S. Environmental Protection Agency, Central Docket Section (A-130), Attn: A-79-42, Waterside Mall, Room 2903B (EPA Library), 401 M Street SW., Washington, D.C. 20460.

Ten copies of the comments are requested but not required.

The public hearing will be held at the U.S. Post Office Auditorium, 1823 Stout Street, Denver, Colorado.

FOR FURTHER INFORMATION: Thomas M. Ball, Certification Division, Environmental Protection Agency, 2565 Plymouth Road, Ann Arbor, MI 48105, 313-668-4280.

SUPPLEMENTARY INFORMATION: Section 215 of the Act mandates this action and establishes the authority to require manufacturers to submit to the Administrator instructions for the adjustment or modification of vehicles being operated at elevations other than the altitude for which the vehicle was originally designed. Section 215 also requires that EPA establish regulations to require these submissions. EPA will not consider adjustments or modifications (hereafter "adjustments") made to vehicles in accordance with instructions (approved under these regulations) as being in violation of the tampering provisions of Section 203(a)(3) of the Act. Although Section 215 does not require specific emission reductions to be achieved as a result of the adjustments, EPA believes the intent of Congress when it enacted Section 215 was to bring about a reduction in emissions from in-use motor vehicles.

Light-duty vehicles (LDV's) and light-duty trucks (LDT's) that are not designed for operation at high altitude (over 4,000 feet above sea level) emit significantly more hydrocarbons (HC) and carbon monoxide (CO) per mile at high altitude than at low altitude. For the 1977 model year, EPA regulations required that manufacturers of LDV's sold at high altitude certify those vehicles to meet emission standards at high altitude. These regulations were revoked for 1978 and later model years by the 1977 Clean Air Act Amendments. As a result of that congressional action, vehicles that comply with emission standards only at low altitude may now be legally sold at high altitude. This proposed regulation will provide procedures for manufacturers to provide instructions to adjust these in-use vehicles in order to reduce vehicle emissions at high altitude.

As required by Section 215(b)(3), this proposed regulation will also require instructions to adjust for low-altitude operation in-use vehicles that are designed for operation only at high altitude. These vehicles may not perform acceptably at low altitude and may emit more pollutants if not adjusted for low-altitude use.

Air quality improvements resulting from this regulatory action will depend on how many vehicles are adjusted in practice. Inspection and maintenance (I/M) programs in the affected areas would provide the greatest incentive to the vehicle owner to have the adjustments performed. Recent data collected in Denver show that 95 percent of the vehicles sampled had incorrect adjustments.[1] We assume that many of these adjustments to other-than-recommended specifications were deliberately performed to improve vehicle performance at high altitude. Thus, even without I/M, vehicles owners may have sufficient incentive to have their vehicles adjusted to compensate for high-altitude operating conditions. However, the possiblity of improved driveability may not be adequate incentive if the costs of adjustments are unreasonable. Therefore, EPA is proposing that approvals of adjustments be dependent on a reasonable projected cost of the adjustment.

Section 215(d) prohibits high-altitude performance adjustments after December 31, 1980 in any states in which I/M programs have not been implemented for their nonattainment areas. This may provide states with added incentives to implement I/M programs. EPA anticipates that nearly all high-altitude states will meet the December 31, 1980 deadline.

General Applicability

Section 215(b)(1) requires instructions for "each class or category of vehicles or engines to which this subchapter [Title II] applies." This language requires that instructions be provided for all model years in which a given class or category of vehicles or engines was regulated under Title II. Thus, this regulation applies to the following:

—1968 and later model year light-duty vehicles and light-duty trucks,

—1970 and later model year heavy-duty engines built after December 31, 1969, and

—1978 and later model year motorcycles built after December 31, 1977.

Because some vehicles have been designed for high-altitude operation (through fixed design or automatic altitude compensation), not all vehicles within the above categories are affected. The regulations include provisions to exempt these vehicles from the high-altitude performance adjustment requirements since they do not need further adjustment for high-altitude operation. However, the regulations still require that manufacturers provide adjustment instructions for the low-altitude operation of vehicles with fixed high-altitude designs.

Emission Requirements

The congressional intent of Section 215 was to reduce emissions from vehicles being operated at high altitude. Section 215 does not specify requirements for minimum reductions in emission levels. In the development of these regulations, EPA considered requiring certain emission reductions, but the approach was rejected since EPA could not find the authority needed in Section 215 and since the Agency could not accurately predict the effect of typical adjustments on emission levels when such a wide range of vehicle types and designs are currently in use. EPA also determined that such requirements are not necessary since emission level reductions are easily obtained by relatively simple adjustments at high altitude. In keeping with the intent of Section 215, EPA will not approve

[1] EPA-460/3-78-001, March 1978, Colorado Motor Vehicle Emission Inspection Pilot Program.

altitude performance adjustments that result in emission level increases, with one exception: EPA will allow any pollutant emission level that is below the low-altitude standard to rise to the level of the standard without jeopardizing the approval of the adjustment (since vehicles need only meet the applicable standards in order to achieve the necessary benefit to air quality).

If the Section 215 language were read as precluding the Administrator from approving instructions which might result in a slight emission increase for one of the pollutants, the effectiveness of Section 215 would be destroyed and the very purpose for enacting it (i.e., to improve emission control and fuel economy in high-altitude areas) would not be achieved. This is because it is practically impossible to reduce HC and CO emissions without experiencing some increase in oxides of nitrogen (NO_x) emissions.

The apparent conflict between the language and the purpose of Section 215 can be reconciled by interpreting the language "equivalent emission control performance with respect to each standard" as permitting slight increases in emissions of one pollutant provided that the applicable standard is not exceeded and that the overall emission performance of the vehicle is improved. While such an interpretation is not the most obvious reading of the statutory language, EPA believes that it is the most sensible interpretation and totally consistent with the purposes of Section 215.

Because of engine combustion characteristics, EPA feels that it is technically appropriate to allow emission levels to increase as long as they stay below the emission standard as described above. NO_x emissions tend to decrease when the air-fuel mixture in the combustion chamber becomes more fuel-abundant (rich) in relation to the available oxygen. At increasingly higher elevations, the density of air decreases, thus decreasing the available oxygen. Since the amount of fuel used does not change in engines not equipped to compensate for the air density change, the air-fuel mixture becomes increasingly rich at high elevations. These rich mixtures create excess fuel combustion products which result in increased HC and CO emission levels. High-altitude adjustments will involve decreasing the amount of fuel into the combustion chamber, or increasing the amount of air, in order to decrease HC and CO emissions. However, in the process of reducing the HC and CO emissions, NO_x emissions nearly always increase from their initial depressed level at high altitude. In order that high-altitude performance adjustments for the reduction of HC and CO pollutants are not made technically impossible, EPA will allow the NO_x level to increase to the level of the standard. EPA expects the benefits from reductions in grams per mile HC and CO emissions to offset any increase in NO_x emissions.

Performance Requirements

In addition to the emission restrictions discussed above, this regulation also contains other restrictions on how altitude performance adjustments may affect the performance of the vehicle. While Section 215 allows EPA to establish performance standards for the approval of altitude adjustment instructions, EPA has determined that specific performance improvement requirements are not necessary since some improvement should naturally result from most adjustments. Such requirements would also be difficult to define and may be unreasonably burdensome for manufacturers to prove. However, in order for altitude performance adjustments to be accepted by the public, the adjustments should not cause poorer fuel economy or vehicle driveability. EPA feels that it is important that these conditions do not occur since no air quality improvements will be realized without public participation. It is unlikely, however, that these restrictions will be difficult to meet since vehicles adjusted for better emission control performance at high altitude should also improve in fuel economy and driveability as a result.

Cost Restrictions

In the development of this regulation, EPA has established altitude performance adjustment cost acceptance criteria intended to assure successful field implementation through vehicle owner participation. EPA believes that if the cost of the adjustments are too high in relation to the driver perceived benefits (e.g., driveability and fuel economy), the program may fail or be less effective due to lack of consumer participation. EPA is proposing what it considers a reasonable cost restriction ($20) based on information currently available on altitude performance adjustments. With ths NPRM, however, EPA solicits comments and pertinent information from vehicle and engine manufacturers (and any other interested party) as to the appropriateness of a cost restriction and to the amount of the restriction.

Reasonable Adjustments

As discussed earlier, EPA chose not to impose minimum emission reduction requirements for altitude performance adjustments. EPA is confident that such requirements are not necessary since EPA expects manufacturers to comply with the spirit and intent of Section 215. This intent is to bring about the maximum possible emission reductions from vehicles at high altitude through adjustments or modifications of reasonable cost and complexity.

Neither Section 215 nor these proposed regulations impose requirements for specific types of adjustments. EPA feels that the manufacturer is in the best position to determine the most effective adjustments within cost limitations. However, manufacturers are cautioned that EPA will only approve adjustments that are reasonably considered as altitude performance adjustments as defined in these regulations. Readjustments that do not change parameter specifications from original specifications *and* are part of normal scheduled maintenance will not be considered as altitude performance adjustments.

An example of this type of adjustment is setting idle fuel/air mixture to specification at high altitude with no accompanying adjustments to other parameters. If this adjustment is already required as part of normal scheduled maintenance, it is likely that most in-use vehicles have had this adjustment done previously. Idle mixture specifications are usually performance specifications such as idle CO, lean best idle speed, or propane injection idle speed. A vehicle brought from low altitude to high altitude should be readjusted to the same specifications to compensate for the air density change. If this is normally done by dealer preparation of new vehicles, or if normal scheduled maintenance calls for this adjustment periodically, EPA does not intend to consider this adjustment alone as an altitude performance adjustment.

At the other extreme, EPA will not accept modifications that are too complex to be properly performed in the field. EPA is particularly concerned about modifications that change emission control systems (as defined in MSPAC Advisory Circular No. 20–B) since these may jeopardize the useful life emission control of some vehicles. For this reason, EPA does not intend to approve altitude performance adjustments that result in different emission control systems.

Data Requirements

Section 215 requires altitude performance adjustment approvals to be "based upon minimum engineering evaluations consistent with good engineering practice." EPA expects that manufacturers will submit a potentially large number of separate altitude adjustment instructions that will cover a wide range of vehicle designs, types, and model years. EPA has determined that specific test data requirements to evaluate this range of vehicles is burdensome and unnecessary. These regulations instead require that the manufacturer provide EPA with information (which may include test data or technical evaluations) that the manufacturer contends is adequate demonstration that the emission and fuel economy acceptance criteria are met. EPA amy require additional information if the information is judged to be insufficient to show compliance with the emission acceptance criteria. The emission standards that EPA will use to determine emission control performance acceptability will be the standards in place for the model year and vehicle type for which the adjustments apply. For example, if an adjustment applies to 1973 light-duty vehicles, and if the NO_x emission level increases as a result of the altitude adjustment, the after-adjustment NO_x emission level will be compared to the 1973 light-duty vehicle NO_x emission standard. Deterioration factors will not be applied to emission data to determine acceptability.

Schedule for Submissions

These regulations impose a deadline of July 1, 1981 for the submission of altitude adjustment instructions for in-use vehicles. EPA anticipates that this will provide manufacturers one year from the final promulgation of these regulations to submit adjustment instructions. For new vehicles, manufacturers must submit adjustment instructions within 30 days from the date which the vehicles were certified by EPA. EPA invites comments as to whether the leadtimes provided in these schedules are appropriate.

Manufacturers should take note that if they fail to submit altitude performance adjustment instructions by the applicable deadline, EPA may impose the penalties specified in Section 205 of the Clean Air Act. However, in cases where EPA finds certain adjustment instructions unacceptable, EPA will allow an extra 30 days for a new submission.

Effect on Parameter Adjustments

EPA has promulgated regulations for LDV's and LDT's beginning in the 1981 model year that will allow EPA to adjust certain parameters to the limits of their adjustability on vehicles before testing. These regulations have the intended effect of inducing designs that have no or limited adjustability. Parameter adjustment regulations are also in effect for model year 1980 and later motorcycles.

The parameter adjustment regulations for 1981 model year and later LDV's and LDT's require that idle mixture and choke adjustments must cost more than 20 dollars and take more than ½ hour to perform in order to be deemed nonadjustable. (This same limitation will apply to idle speed in ignition timing beginning in the 1982 model year.)

The simple adjustable parameters of idle mixture, choke, and ignition timing are, therefore, eliminated for simple altitude adjustments. However, a number of vehicles beginning in the 1981 model year will be exempt from the proposed Section 215 regulations because they are altitude compensated to some extent. Most feedback control systems will be included in this category. EPA has proposed rules effective beginning in the 1982 model year that will impose high-altitude emission standards and require that all new LDV's and LDT's be at lease capable of being modified to meet the high-altitude standards. Under those requirements all 1982 and subsequent model year LDV's and LDT's will be exempt from the requirements of these proposed regulations. It is apparent that only a portion of 1981 model year vehicles will have an adjustability problem to meet the Section 215 requirements. Under this proposed rule, manufacturers must still recommend adjustments or modifications that any service facility can perform for 20 dollars or less.

In order to remedy the adjustability problem for 1981 model year vehicles, EPA may consider a provision in this rulemaking that would allow vehicle manufacturers to recommend more costly adjustments, but that the amount in excess of 20 dollars must not be charged to the customer. If this provision is adopted, the vehicle manufacturer would be required to provide a means for independent repair establishments to perform the adjustment at the same cost to a vehicle owner as will be charged by a franchised repair facility (unless a waiver is granted under Section 207(c)(3)(B) of the Act). The Agency believes that, in most instances, allowing manufacturers to provide subsidized adjustments only at their franchised dealerships would be contrary to the congressional intent of Section 207 of the Act to allow all repair facilities to be able to participate in all nonwarranty emission-related maintenance not exceeding 2 percent of the retail purchase price of the vehicle.

The Agency requests comments from any interested party on the appropriateness of a provision as described above, and requests comments from vehicle manufacturers (or any other interested party) on the types of altitude performance adjustments that can be recommended for vehicles subject to parameter adjustment regulations. The comments should also provide the estimated cost to perform the adjustments.

EPA does not anticipate any problems for 1980 and subsequent model year motocycles to meet the requirements of this proposed regulation. Even though these motorcycles are subject to parameter adjustment regulations, modifications can be made (such as changing carburetor jet sizes) for high-altitude operation that do not involve parameter adjustments or exceed the 20-dollar limit.

Air Quality Benefits

The severity of the air pollution problems in the larger, high-altitude cities confirms the need for the regulation. Denver, Salt Lake City, and Albuquerque are rapidly growing, automobile-oriented cities. The weather conditions in these cities, in combination with the high altitude and extensive dependence on the automobile, result in air quality problems that are not normally characteristic of the size of the cities. (Denver, the largest city of the three, is only the 24th largest metropolitan area in the nation.) It is important that the emission control systems used on high-altitude vehicles be adjusted to operate as efficiently as possible to reduce the serveity of high-altitude air quality problems.

In December of 1978, EPA issued a policy (MSAPC Advisory Circular No. 80) to allow manufacturers to obtain altitude performance adjustment approvals voluntarily. The limited data obtained from this program show that HC and CO emissions can be reduced by up to 40 percent at high altitude through simple adjustments.

As mentioned earlier, a very large portion of in-use vehicles at high altitude are adjusted incorrectly. When EPA initiated a study to correct the maladjustments, the average emission

levels decreased by 22 percent for HC, 30 percent for CO, and 5 percent for NO_x. Under this regulation, manufacturers are likely to recommend adjustments that will incidentally correct some maladjustments. These readjustments will also set the devices to new specifications which may further reduce emission levels at high altitude. The benefits from this regulation will thus be twofold, and in-use vehicle emissions may improve beyond what is indicated by data from test vehicles that were not initially maladjusted.

Costs

EPA does not anticipate that this regulation will result in significant costs to motor vehicle manufacturers. The techniques for reducing emissions from vehicles at high altitude are established and well-known for past and current vehicle designs. EPA estimates that manufacturers [1] development, testing, and administrative costs for altitude adjustment instructions to apply to all applicable past model years will not exceed $2 million. The subsequent annual cost to all manufacturers to provide adjustments for new vehicles is not expected to exceed $500,000. This annual cost may be reduced considerably (by as much as 60 percent) if light-duty vehicles and light-duty trucks are exempted from the Section 215 requirement because of the high-altitude emission standards regulation beginning in model year 1982. The cost for high-altitude adjustments or modifications will then be attributed to that regulation. EPA invites comments from any interested party as to these cost estimates.

The cost of this regulation to the general public will depend on the level of participation of vehicle owners and on the amount charged to vehicle owners for the adjustments. Even though the adjustments costing as much as 20 dollars would be allowed, information received from manufacturers taking part in the voluntary program (through MSAPC Advisory Circular No. 80) indicates that adjustment costs will average about 10 dollars. There is an estimated population of 4 million in-use vehicles that are subject to this regulation in high-altitude areas. Assuming that a maximum of 50 percent of in-use vehicles are adjusted in the first year of this program, the cost to consumers to adjust in-use vehicles will not likely exceed 20 million dollars (1979 dollars) in the first year of operation. Annual consumer costs following the first year should be considerably less since new light-duty vehicles light-duty trucks will likely be exempt under the high-altitude standards regulation. If annual high-altitude sales of nonexempt vehicles (including heavy-duty trucks and motorcycles) are about 200,000 vehicles, the annual cost to consumers should not exceed $2 million. EPA invites comments from any interested party regarding consumer costs.

The cost of the adjustments to consumers may be partially or fully offset by fuel economy improvements. Data from the voluntary altitude performance adjustment program indicate that average fuel economy improvements may be as much as 3.5 percent for light-duty vehicles and light-duty trucks. Assuming that the average fuel economy improvement will be between 1 percent and 3 percent and that the average fuel economy for these vehicles (1968 through 1980 model years) is 15 miles per gallon, the fuel savings for the average vehicle per year will be between 8 and 23 gallons. With the price of gasoline at about $1.10 per gallon, the fuel economy improvement may pay for the altitude adjustment in the first 12,000 miles of operation. For light-duty vehicles and light-duty trucks alone, the fuel savings could amount to between 14 million and 40 million gallons in the first year of operation with 50 percent participation.

COMMENTS AND THE PUBLIC DOCKET: We request that, to the extent possible, comments be submitted prior to the hearing. EPA intends to assure that all interested parties have an opportunity to study all information that may become the basis for EPA's final action in this proceeding. Accordingly, the Agency will not consider in this rulemaking any information that the Agency cannot make publicly available. Anyone who wishes to submit information responding to this Notice of Proposed Rulemaking is cautioned that EPA will not consider any comments which are claimed, in whole or in part, to be confidential. EPA will return such comments to the commenter.

Copies of material relevant to this rulemaking action are contained in the Public Docket No. A–79–42 at the U.S. Environmental Protection Agency, Central Docket Section, Waterside Mall, Room 2903B (EPA Library), 401 M Street, S.W., Washington, D.C. 20460. The docket may be inspected between the hours of 8:00 a.m. and 4:00 p.m. Monday through Friday. A reasonable fee may be charged for copying services.

EVALUATION PLAN: EPA intends to review the effectiveness and need of the provisions contained in this action after initial implementation of the final regulation. EPA will provide an evaluation plan at the time of issuance of the final rule.

REPORTING AND RECORDKEEPING REQUIREMENTS: Under the EPA's "sunset" policy for reporting requirements in regulation, the reporting requirements in this regulation will automatically expire 5 years from the date of promulgation, unless EPA takes affirmative action to extend them. To accomplish this, a provision automatically terminating the reporting requirements at that time will be included in the text of the final regulation.

REGULATORY ANALYSIS: The Administrator has determined that this is a "significant routine" regulation. The impact of the regulation will be significant, in that Agency resources will be required to develop and implement the regulation and because an air quality improvement may be expected as a result of the regulation. However, because of the limited number of vehicles that will be affected by the regulations, the limited geographical area in which the primary impact of the regulations will be felt, and the failure of the regulation to trigger any of the criteria governing the preparation of a regulatory analysis, the proposal is not a "major" regulation.

This regulation does not require preparation of an Environmental Impact Study (EIS) under the National Environmental Policy Act, although the environmental effects of the regulation will be considered during the rulemaking. Similarly, an Economic Impact Assessment (EIA) is not required since the proposal does not meet the criteria of Section 317(a) of the Act, and the action does not meet the criteria requiring preparation of a Regulatory Analysis.

Accordingly, it is proposed to amend 40 CFR Part 86 by adding a new Subpart K to read as follows:

Subpart K—Regulations for Altitude Performance Adjustments for New and In-Use Motor Vehicles and Engines

Sec.

86.1001 General applicability.
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86.1005 Information to be submitted.
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Subpart K—Regulations for Altitude Performance Adjustments for New and In-Use Motor Vehicles and Engines

§ 86.1001 General applicability.

This subpart applies to manufacturers of motor vehicles and motor vehicle engines (hereafter referred to as vehicles) which are subject to the requirements of title II of the Clean Air

Act. This subpart applies to the following vehicles:

(a) 1968 and later model year light-duty vehicles and light-duty trucks.

(b) 1970 and later model year heavy-duty engines built after December 31, 1969.

(c) 1978 and later model year motorcycles built after December 31, 1977.

§ 86.1002 Definitions.

The definitions provided in Subpart A also apply in this subpart. Additional definitions that apply in this subpart are as follows:

"Altitude performance adjustments" are adjustments or modifications made to vehicle, engine, or emission control functions in order to improve emission control performance at altitudes other than those for which the vehicles were designed.

"Low altitude" means any elevation less than or equal to 1219 meters (4,000 feet).

"Manufacturer parts" are parts produced or sold by the manufacturer of the motor vehicle or motor vehicle engine.

§ 86.1003 General requirements.

(a) Manufacturers of vehicles specified in § 86.1001 shall submit to the Administrator for approval altitude adjustment instructions for all of those vehicles except the vehicles described in paragraph (b) of this section.

(b) The following vehicle exemptions apply to the requirements of this subpart:

(1) Manufacturers are not required to submit *high*-altitude adjustment instructions for vehicles that are certified as meeting the appropriate emission standards at high altitude. However, manufacturers *are* required to submit *low*-altitude adjustment instructions for these vehicles if they are not certified to meet the appropriate emission standards at low altitude and do not meet the exemption criterion described in paragraph (b)(2) of this section.

(2) Manufacturers are not required to submit altitude adjustment instructions for vehicles equipped with systems or devices that compensate (in full or in part) the engine fuel metering system for air density changes, *and* if further emission reductions cannot be obtained by adjusting the vehicle at a cost of 20 dollars (1979 dollars) or less (including parts and labor). Manufacturers claiming this exemption must submit to the Administrator a notification of the claim specifying the affected vehicles. The notification must also describe the compensating system used, and must contain a statement that further emission reductions cannot be obtained for 20 dollars or less, or that the adjustments would be too complex for the average mechanic to perform.

(c) Manufacturers shall meet the requirements of paragraph (a) according to the following schedule:

(1) Altitude adjustment instructions for all 1980 and earlier model year vehicles or engines shall be submitted to the Administrator by July 1, 1981.

(2) Altitude adjustment instructions for 1981 and later model year vehicles or engines shall be submitted to the Administrator within 30 days of the issuance of the certificate of conformity for those vehicles or engines. For vehicles or engines certified for the 1981 model year before the publication of this regulation, altitude adjustment instructions shall be submitted within 30 days of the publication of this regulation.

(d) Failure to submit altitude performance adjustment instructions in accordance with this section is a violation of Section 203(a)(3) of the Clean Air Act and may result in penalties as specified in Section 205 of the Clean Air Act. The Administrator may grant extensions of the schedule in paragraph (c) of up to 30 days if the manufacturer submits a written request to the Administrator specifying the reasons for the need for the extension.

(e) The adjustment instructions (including labels) that the Administrator approved under this subpart shall be made available by the manufacturer at no cost to service outlets and the general public. EPA encourages manufacturers to notify vehicle owners in high-altitude areas of the availability of high-altitude adjustments.

(f) If altitude adjustments are performed according to the instructions approved by the Administrator, they will not be treated as violations of the tampering provisions of Section 203(a) of the Act except as described below:

(1) A violation may occur when high-altitude adjustments are performed on vehicles at low-altitude locations. High-altitude adjustments performed at the designated high-altitude locations specified in § 86.079–30(a)(5) will not be considered violations.

(2) In accordance with Section 215(d) of the Act, after December 31, 1980, the Administrator will only permit high-altitude adjustments in high-altitude areas of states in which inspection and maintenance programs have been instituted for their nonattainment areas. After December 31, 1980, high-altitude adjustments performed in any other state may be considered a violation.

§ 86.1004 Conditions for disapproval.

(a) The Administrator shall *not* approve altitude performance adjustments that will:

(1) Cause any regulated pollutant emission level to increase if the emission level exceeded the appropriate emission standard before adjustment was made.

(2) Cause any regulated pollutant emission level to exceed the appropriate emission standard if the emission level did not exceed the emission standard before the adjustment was made.

(3) Cause decreases in fuel economy as measured by the procedures in Part 86.

(4) Cause any reduction of vehicle performance (as evaluated by the manufacturer) such that vehicle drivers will likely complain.

(5) Result in a total cost to the vehicle owner of more than 20 dollars (1979 dollars) including parts and labor.

(6) Be of such technical complexity or require such complex, expensive, or exclusive equipment that a competent mechanic in an average service establishment cannot perform the adjustments correctly. Adjustment procedures should not require knowledge or training beyond that required to perform normal engine tuneups. All required equipment must be available to any service establishment at competitive cost.

(7) Require the use of manufacturer parts, unless they are necessary to ensure emission control performance and unless the Administrator grants a waiver under Section 207(c)(3)(B) of the Act.

(b) If the Administrator determines that the altitude performance adjustment instructions cannot be approved, the Administrator shall notify the manufacturer in writing of the disapproval. This notification shall explain the reasons for the disapproval.

(1) Within 20 days of receipt of a notification of disapproval, the manufacturer may file a written appeal to the Administrator. The Administrator may allow additional oral or written testimony prior to rendering a final decision.

(2) If the manufacturer files no appeal with the Administrator, the disapproval becomes final.

(3) Within 30 days following the Administrator's final decision of disapproval, the manufacturer must submit new altitude performance adjustment instructions applying to all of the vehicles for which the disapproved instructions applied. If these new instructions are not submitted within 30 days, EPA may take action

under Sections 203(a)(3) and 205 of the Act.

(i) If the new altitude performance adjustment instructions are disapproved by the Administrator, the manufacturer may follow the appeal procedures under paragraphs (b)(1) and (b)(2) of this section.

(ii) If the Administrator makes a final decision to disapprove the new instructions, EPA may take action under Sections 203(a)(3) and 205 of the Act.

§ 86.1005 Information to be submitted.

(a) Manufacturers shall submit to the Administrator the text of the altitude performance adjustment instructions to be provided to vehicle owners and service establishments. Each set of altitude performance adjustment instructions must set forth the adjustment procedure (including the installation of the label required by § 86.1006) to be followed and identify the vehicles for which the instructions are applicable. At a minimum, each set of instructions shall identify the vehicle applicability by manufacturer, car line, model year, engine displacement, engine family, and exhaust emission control systems. Manufacturers may specify further, if necessary, but such specifications must be identifiable to the public and the service industry through vehicle marking or codes.

(b) The manufacturer shall submit to the Administrator the following information about the adjustments:

(1) Specifications of changes in calibrations of any component, including the original and new calibration values or curves;

(2) Descriptions of component additions, including a full description of the new components along with the configurations (sketch or drawing), calibration values, and part numbers;

(3) Descriptions of component replacements, including all items in paragraph (2), above, for the new parts. Also, a description of the differences between the original component and the new component with respect to design, calibration, and function;

(4) The estimated amount (in dollars) to be charged to vehicle owners for the performance of the adjustments. This amount must include the cost to the vehicle owner of labor and parts; and

(5) Descriptions of any special tools necessary to perform the adjustments and the estimated retail cost of such tools.

(c) The manufacturer shall submit to the Administrator the following evaluations of the adjustments:

(1) Information that shows that the conditions of § 86.1004 (a)(1) through (a)(3) are not caused by the adjustment. The manufacturer may submit engineering evaluations instead of test data if the effects of the adjustment on emissions are well known. (EPA encourages manufacturers to submit test data in *all* cases so that the Administrator can make more efficient judgments, and so that the benefits of this program may be better evaluated.)

(2) A statement that vehicle performance is generally unchanged or improved as a result of the adjustments, and supporting information for this statement consisting of technical evaluations or driver evaluations.

(3) Information that shows compliance with Section 202(a)(4)(A) of the Act (which prohibits vehicles from causing unreasonable risks to public health, welfare, and safety).

(d) The manufacturer shall submit to the Administrator for approval a copy or sample of the label required by § 86.1006 and a copy of the instructions for installation of the label.

§ 86.1006 Labeling.

(a) The manufacturer shall make available to the public as part of the altitude performance adjustment instructions the labels described in this section. Instructions for installing the labels according to the requirements of this section shall be provided with each label.

(b) The label installation instructions shall indicate that the label should be placed in a readily visible position in the engine compartment and beside (to the extent possible) the existing label which is required under § 86.079–35. The instructions shall also indicate that the label should not be put on any equipment that can be easily detached from the vehicle.

(c) The label must be constructed such that if installed properly, it cannot be removed without destroying or defacing the label.

(d) The label shall contain the following information lettered in the English language in block letters and numerals, which must be of a color that contrasts with the background of the labels:

(1) The label heading: Vehicle Emission Control Information Update;

(2) Full corporate name and trademark of the vehicle manufacturer;

(3) The statement: "This vehicle has been (adjusted) (modified) to improve emission control performance when operated at (high) (low) altitude";

(4) Information on where altitude performance adjustment instructions may be obtained or include the actual altitude performance adjustment instructions;

(5) The new tuneup specifications (if changed from the original label specifications) at the applicable altitude.

(Sections 215 and 301 of the Clean Air Act, as amended, 42 U.S.C. §§ 7550 and 7601.)

Dated: January 15, 1980.

Douglas Costle,

Administrator.

[FR Doc. 80–2174 Filed 1–23–80; 8:45 am]

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